



NIEHS

National Institute of
Environmental Health Sciences

Post 9/11 and Katrina Changes in Disaster Response

Joseph T. Hughes, Jr.

Director

Worker Education and Training Program
Division of Extramural Research & Training

September 14, 2006



WORKER EDUCATION AND TRAINING PROGRAM



Timeline of NIEHS WTC-Related Activities

September 2001

Provided immediate awards to grantees

- ✦ conduct personal exposure assessments
- collect and analyze dust and air samples
- conduct respiratory health study
- initiate epidemiology studies
- provide exposure information and fact sheets to communities
- develop a physician's advisory regarding WTC-related clinical conditions



April 2002 & April 2003

Congress provided NIEHS with special appropriation:

- ✦ exposure assessment
- ✦ clinical and epidemiology studies
- ✦ community outreach

Examples of Early NIEHS WTC Activities

- **Sept 2001** Collaboration between NYU, UMDNJ, EPA-NERL - Dust samples collected at over a dozen locations surrounding WTC disaster area and bulk samples of settled dust/smoke analyzed
- **Sept 2001** Collaboration between Mount Sinai and NYCDH. Provided industrial hygiene and clinical expertise and developed fact sheets regarding health concerns
- **Oct 2001** Collaboration between Johns Hopkins, Columbia, International Brotherhood of Teamsters, NYC Teamsters Locals 282 and 831. Personal exposure assessments and area monitoring
- **Oct 2001** Collaboration between Columbia, local unions, council members and community boards. Conducted community forum for residents of Harlem, East Harlem and Washington Heights
- **Nov 2001** Collaboration on NYU and EPA-NERL. Collect and analyze indoor dust samples south of Ground Zero

NIEHS Update

- WETP Program Background
- 9/11 Training Response
- NRP WSH Annex
- Katrina Training Response Activities

Safely Cleaning Up Contaminated Communities




WORKER EDUCATION AND TRAINING PROGRAM

NIEHS 9/11 Worker Response

Immediate and sustained supplemental funding to support World Trade Center training response efforts:

- On-site training
- Provision and fit-testing of respirators
- Worker exposure monitoring
- Responder training course
- Consultation on the site safety plan





“Potentially the most dangerous workplace in America.”
John Henshaw, OSHA

NIEHS and its awardees developed an
official training course at Ground Zero
for 4,000 workers



LEARNING FROM DISASTERS:

WEAPONS OF MASS DESTRUCTION PREPAREDNESS THROUGH WORKER TRAINING

- **Report of an Expert Workshop**
- **Sponsored by:**
- Worker Education and Training Program,
- National Institute of Environmental Health Sciences
- **Held:**
- April 25-26, 2002 • Nashville, TN

Training must be continuous

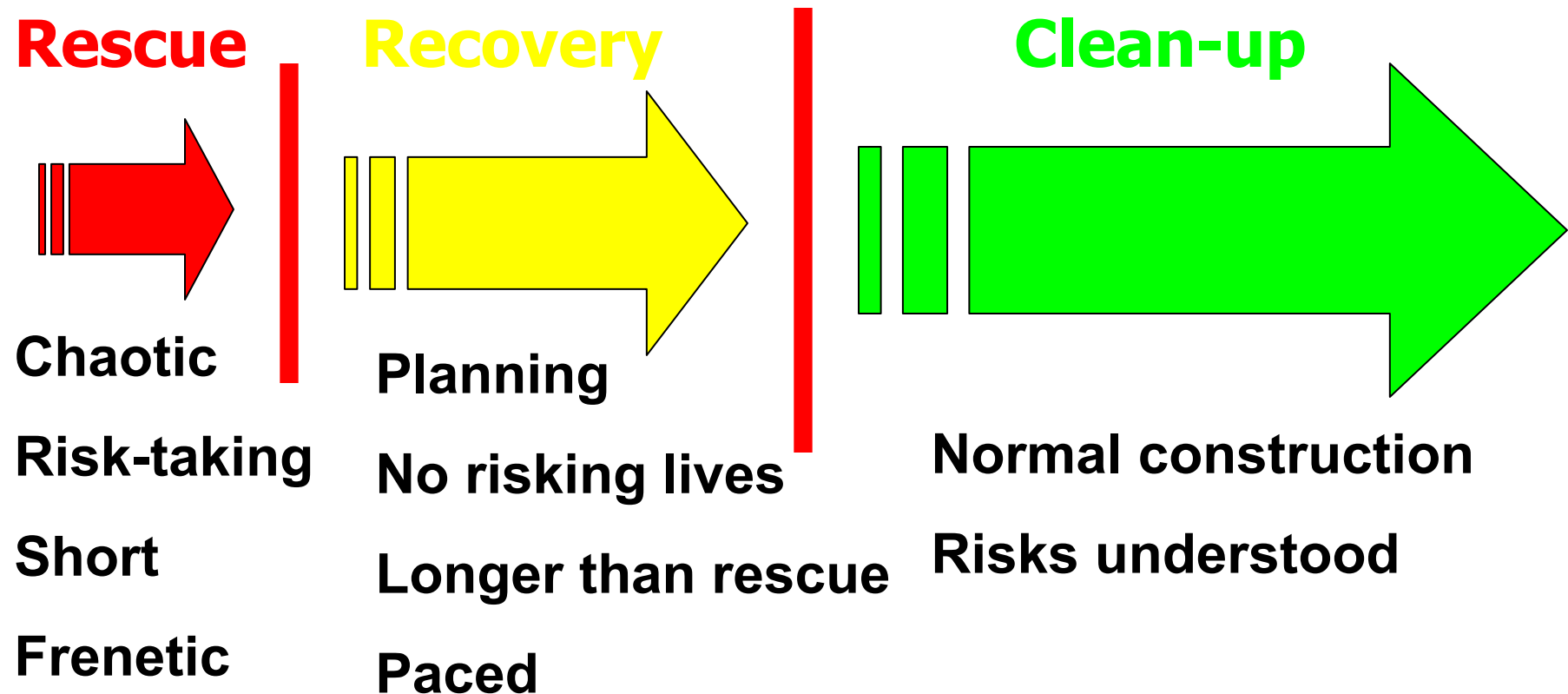
- The scientific/medical/technical aspects of disaster response are rapidly evolving.
- Training needs to be developed in such a manner that it is kept “evergreen.”
- - Develop training curricula that establish a mechanism for peer review of the materials. (Currently have no standards on many key points.)

NIEHS WSH Training Annex

- Provides training assistance through FEMA-OSHA during national disasters
 - Instructional staff
 - Curriculum development experts
 - Subject matter experts
 - Training facility
- Provides technical assistance
 - Respirator fit testing
 - Distribution of PPE

Extending rescue extends risk for response workers

Phases of Response: Impact on Safety



Working Through ICS

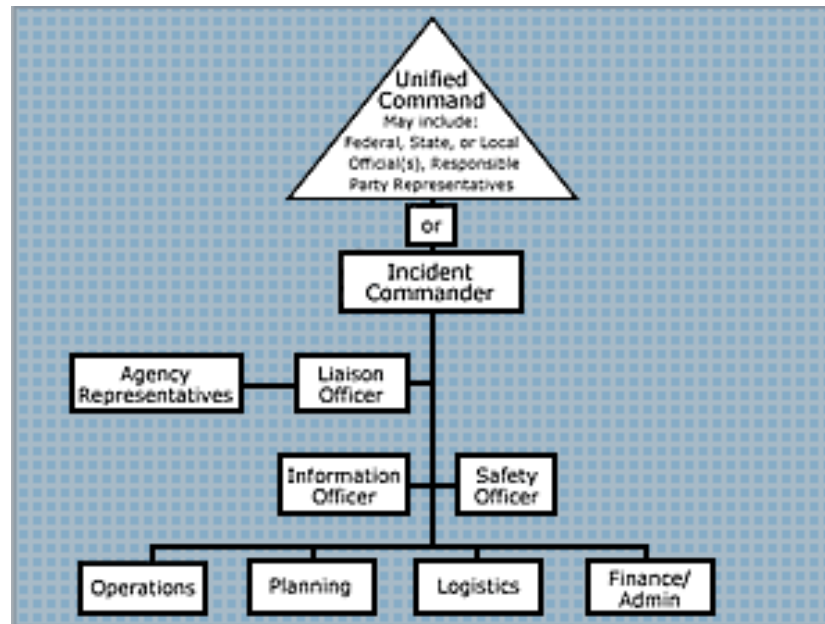


NIEHS – OSHA Katrina Response Initiative



Other Protective Measures

- Follow the Incident Command System



WORKER EDUCATION & TRAINING PROGRAM

WORKER EDUCATION AND TRAINING PROGRAM

Katrina Field Training



WORKER EDUCATION AND TRAINING PROGRAM

Context for Disaster Response

- Plan for a chain of events scenario.
- Can not predict with high degree of confidence: When, where, how, and duration. So...

Must plan for flexibility.

- Need immediate access to protocol for response and mechanism of coordination.

Disaster Planning Flexibility

- **Plan for check-points/assessment, along the way after disaster.**
- **Plan alternate approaches (more than one way to get the job done).**
- **Plan national networking along with use of local response.**
- **Need both generalists and access to specialists.**
- **Plan for Stress and Chaos!**

Katrina Training Lessons Learned

- Early activation of Worker Safety & Health Annex to provide S&H resources ASAP
- Explore ways to cover state and locals and provide Worker S&H Annex services to them
- Community health issues quickly merge with worker occupational training issues
- Preparedness training prior to deployment
 - Situational awareness
- Consensus for training topics (with qualifications for disaster workers)